

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2001-SW-52-AD; Amendment 39-13115; AD 2003-08-04]

RIN 2120-AA64

Airworthiness Directives; Eurocopter France Model EC120B Helicopters

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD) for the specified model Eurocopter France (ECF) helicopters that requires inspecting the attachment of the bolted assemblies of the cyclic pitch flight control torque tube (torque tube) for an appropriate locking device. If a bolted assembly is single-locked, the AD requires, if necessary, tightening the self-locking nuts at certain intervals and modifying the torque tube after a certain time. This amendment is prompted by the discovery that some of the attachments of the torque tube were fastened with a single-locking device instead of the intended double-locking device. The actions specified by this AD are intended to prevent separation of the cyclic pitch stick yokes from the torque tube, loss of cyclic control, and subsequent loss of control of the helicopter.

DATES: Effective May 22, 2003.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of May 22, 2003.

ADDRESSES: The service information referenced in this AD may be obtained from American Eurocopter Corporation, 2701 Forum Drive, Grand Prairie, Texas 75053-4005, telephone (972) 641-3460, fax (972) 641-3527. This information may be examined at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas; or at the Office of the Federal Register, 800 North Capitol Street, NW., Suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Richard Monschke, Aviation Safety Engineer, FAA, Rotorcraft Directorate, Rotorcraft Standards Staff, Fort Worth, Texas 76193-0110, telephone (817) 222-5116, fax (817) 222-5961.

SUPPLEMENTARY INFORMATION: A proposal to amend 14 CFR part 39 to include an AD for the specified model ECF helicopters was published in the Federal Register on February 14, 2002 (67 FR 6883). That action proposed determining whether the attachment of the bolted assembly of the torque tube is a single or double-locking device; and if the bolted assembly is single-locked, repetitively inspecting and, if necessary, tightening the self-locking nuts to a specified torque. The AD also proposed modifying the torque tube to provide double locking for the attachment pins of the cyclic pitch stick yokes to the torque tube after a specified time interval.

The Direction Generale De L'Aviation Civile (DGAC), the airworthiness authority for France, notified the FAA that an unsafe condition may exist on ECF Model EC120B helicopters. The DGAC advises that the design fails to provide double-locking of the attachment pins of the cyclic pitch stick yokes to the torque tube.

ECF has issued Alert Service Bulletin No. 67A003, dated August 2, 2001 (ASB), which specifies inspecting single-locking devices within 50 hours time-in-service (TIS) and modifying single-locking devices to make them double locking within 500 hours TIS or 24 months, whichever occurs first. The DGAC classified this ASB as mandatory and issued AD 2001-373-008(A), dated August 22, 2001, to ensure the continued airworthiness of these helicopters in France.

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the comment received.

One commenter, the manufacturer, states that the compliance time should be changed to 500 hours TIS or 24 months, whichever occurs first, in accordance with DGAC AD No. 2001-373-008(A). The commenter thinks the more restrictive compliance time proposed in the AD is unnecessary and will unnecessarily penalize U.S. operators. The commenter believes the initial and periodic checks required in the AD provide an adequate measure of safety until the modification is accomplished at the less restrictive compliance time. The commenter believes that with these checks an unsafe condition is not justified.

The FAA agrees that the inspections in the ASB provide a temporary measure of safety. However, we strongly prefer terminating action in lieu of inspections for unsafe conditions. In this case, certain ECF Model EC120B helicopters were manufactured with a single locking device on the pins that connect the cyclic pitch stick yokes to the pitch torque tube. These pins must be retained by two separate locking devices in accordance with 14 CFR § 27.607. Additionally, self-locking nuts must incorporate a nonfriction locking device in addition to the self-locking device. In determining the compliance time for modifying the torque tube, we considered the consequences of missed inspections and the seriousness of this unsafe condition, possible loss of cyclic pitch control. The FAA has determined that, due to the seriousness of this unsafe condition, the torque tube must be modified within the next 250 hours TIS or 12 months, whichever occurs first. This is more than ample time for U.S. operators to install a relatively simple fix to terminate the inspections. Considering the safety implications, these compliance times do not unnecessarily penalize U.S. operators; therefore, the compliance time will remain as proposed.

After careful review of the available data, including the comments noted above, the FAA has determined that air safety and the public interest require the adoption of the rule as proposed.

On July 10, 2002, the FAA issued a new version of 14 CFR part 39 (67 FR 47997, July 22, 2002), which governs FAA's AD system. The regulation now includes material that relates to special flight permits, alternative methods of compliance, and altered products. However, for clarity and consistency in this final rule, we have retained the language of the NPRM regarding that material.

The FAA estimates that this AD will affect 44 helicopters of U.S. registry, and the required actions will take approximately 5 work hours per helicopter to accomplish at an average labor rate of \$60 per work hour. Required parts will cost approximately \$195. Based on these figures, we estimate the total cost impact of the AD on U.S. operators to be \$21,780.

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (1) Is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption ADDRESSES.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding a new airworthiness directive to read as follows:

AIRWORTHINESS DIRECTIVE

Aircraft Certification Service
Washington, DC



U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at "www.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2003-08-04 Eurocopter France: Amendment 39-13115. Docket No. 2001-SW-52-AD.

Applicability: Model EC120B helicopters, serial numbers 1001 through 1029 inclusive, certificated in any category.

Note 1: This AD applies to each helicopter identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For helicopters that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (e) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent separation of the cyclic pitch stick yokes from the cyclic pitch flight control torque tube (torque tube), loss of cyclic control, and subsequent loss of control of the helicopter, accomplish the following:

(a) Within 50 hours time-in-service (TIS), determine whether each attachment of the bolted assembly of the torque tube (attachment) has a single or double-locking device in accordance with the Accomplishment Instructions, paragraph 2.B.1., of Eurocopter France Alert Service Bulletin No. 67A003, dated August 2, 2001 (ASB).

(1) If the attachment has a double-locking device (a castellated self-locking nut with a cotter pin), no further action is required by this AD.

(2) If the attachment has a single-locking device (a castellated self-locking nut without a cotter pin or a self-locking nut only), in accordance with the Accomplishment Instructions, paragraph 2.B.1., of the ASB, before further flight:

(i) Torque each nut to 0.4 to 0.5 mdaN (36 to 44 inch-lbs), and

(ii) Apply a slippage mark on the nut and torque tube.

(b) At intervals not to exceed 50 hours TIS, inspect the attachment for movement of the locking device indicated by a misalignment of the slippage mark.

(1) If no movement has occurred, record the inspection.

(2) If movement has occurred, replace, retorque, and reapply the slippage mark to the nut in accordance with the Accomplishment Instructions, paragraph 2.B.2., of the ASB.

(c) Within 250 hours TIS or 12 months, whichever occurs first, modify the torque tube in accordance with the Accomplishment Instructions, paragraph 2.B.3., of the ASB.

(d) Modifying the torque tube in accordance with paragraph (c) of this AD is terminating action for the requirements of this AD.

(e) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Regulations Group, Rotorcraft Directorate, FAA. Operators shall submit their requests through an FAA Principal Maintenance Inspector, who may concur or comment and then send it to the Manager, Regulations Group.

Note 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Regulations Group.

(f) Special flight permits may be issued in accordance with 14 CFR 21.197 and 21.199 to operate the helicopter to a location where the requirements of this AD can be accomplished.

(g) The inspection of the attachment of the bolted assembly of the torque tube and modification of the torque tube shall be done in accordance with the Accomplishment Instructions, paragraph 2.B.1., 2.B.2., and 2.B.3., of Eurocopter Alert Service Bulletin No. 67A003, dated August 2, 2001. The Director of the Federal Register approved this incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from American Eurocopter Corporation, 2701 Forum Drive, Grand Prairie, Texas 75053-4005, telephone (972) 641-3460, fax (972) 641-3527. Copies may be inspected at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(h) This amendment becomes effective on May 22, 2003.

Note 3: The subject of this AD is addressed in Direction Generale De L'Aviation Civile, (France) AD 2001-373-008(A), dated August 22, 2001.

Issued in Fort Worth, Texas, on April 8, 2003.
Michele M. Owsley,
Acting Manager, Rotorcraft Directorate, Aircraft Certification Service.
[FR Doc. 03-9013 Filed 4-16-03; 8:45 am]
BILLING CODE 4910-13-P